

Titan TV Presents - DNA Replication - A Video Interview

Your group is asked to prepare a video interview explaining and demonstrating DNA Structure and Replication.

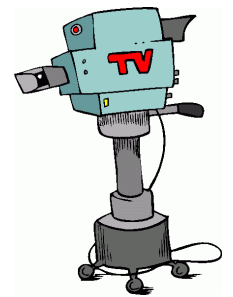
One student in your group will conduct the interview. **Speak loud, clear, and slow enough so we can understand you.**

One student in your group will have to operate the camera. As the camera operator, it is your job to make sure the interview includes footage of the interviewer asking questions, the group members answering the questions, **and footage of the DNA model as it is being used as a model to demonstrate DNA Replication.**

Be **creative** and **have fun** (role play with names etc.) **but be thorough!!!**
SUBMIT THE ENTIRE INTERVIEW AS ONE VIDEO SEGMENT/FILE.

You may need to refer to you DNA replication notes.
YOU MUST keep the interview to **3-4 minutes!!!**

When you are finished **upload to YouTube** set as **unlisted** and email me the link.



Use the following questions to **guide** the interview.

1. Introduce yourself as the reporter. Be creative.
2. Have the other members introduce themselves so I know who is on your team.
3. Briefly explain the structure of the DNA molecule. Show and explain the following; sugar phosphate backbone, a nucleotide, hydrogen bonds, show the base pairs explaining the rules for pairing.
4. **Show and tell** me how DNA Replication **begins**?
5. What types of bonds must be broken to begin the process?
6. What name do we give to the shape of the DNA when it is unzipped and ready to replicate?
7. Show and tell us how the **LEADING STRAND** replicates. **(INCLUDE ONE RNA PRIMER AT THE BEGINNING OF THE LEADING STRAND).**
8. What is the name of the key enzyme that adds the new DNA nucleotides on the leading strand?
9. Show and tell us how the **LAGGING STRAND** replicates. **(INCLUDE TWO RNA PRIMERS ON THE LAGGING STRAND...ONE IN THE MIDDLE AND ONE RIGHT AT THE TOP OF THE PARENT STRAND CLOSEST TO THE FORK).**
10. What is the name of the key enzyme that adds the new DNA nucleotides on the lagging strand?
11. Show and tell us how the final 2 steps of DNA replication take place (include the role DNA Ligase).
12. Sign-off when the interview is finished.

